SATPREP Name_____

Assignment:Exponent and Logarithm as inverses

Date_____

Find the inverse of each function.

1) $y = -\log_2 x$

2) $y = \log_5 (x - 8)$

3) $y = \log_6 (-4x)$

4) $y = \log_6 x^3$

5) $y = \log_{\frac{1}{3}} (-3x^5)$

6) $y = \log_3 (3x) + 1$

7) $y = 6 \ln (-3x^3)$

8) $y = -7 \ln (3x + 1)$

9) $y = \left(\frac{e^x + 3}{3}\right)^{\frac{1}{5}}$

10) $y = \left(\frac{e^x - 7}{4}\right)^{\frac{1}{3}}$

Answers to Assignment:Exponent and Logarithm as inverses

1) $y = \dfrac{1}{2^x}$

2) $y = 5^x + 8$

3) $y = -\dfrac{6^x}{4}$

4) $y = 6^{\frac{x}{3}}$

5) $y = \left(\dfrac{\left(\frac{1}{3}\right)^x}{-3}\right)^{\frac{1}{5}}$

6) $y = \dfrac{3^{x-1}}{3}$

7) $y = \left(\dfrac{e^{\frac{x}{6}}}{-3}\right)^{\frac{1}{3}}$

8) $y = \dfrac{e^{-\frac{x}{7}} - 1}{3}$

9) $y = \ln\left(3x^5 - 3\right)$

10) $y = \ln\left(4x^3 + 7\right)$